EFFICIENT HEATING AND COOLING

- ❒ A mechanical contractor has sized the air conditioning unit using "Manual J" (Note: A right-sized A/C runs longer than an oversized unit, but uses less energy and runs more efficiently).
- ❒ The air conditioner has a cooling efficiency of 12 SEER or higher.
- ❒ The A/C system brings in fresh air.
- ❒ Return air ducts or transfer grills in every enclosed, livable room (undercut doors are not sufficient).
- ❒ Uses a programmable thermostat.
- ❒ Ceiling fans installed in all major rooms.

AIRTIGHT DUCTS

Most houses lose 25% of their conditioned air through leaks in the ductwork. This affects utility bills, air quality and household safety.

- ❒ Ducts have a minimum R-4 insulation in conditioned spaces, and a minimum R-6 in unconditioned spaces such as attics.
- ❒ The ducts have been pressure-tested for leaks by a qualified technician.

AIR FILTERS

A good air filter affects the quality of the air you breathe and increases the life span of the heating and cooling equipment.

- ❒ The filter is a "pleated media" type or electronic.
- ❒ The filter is easy to change.

EFFICIENT APPLIANCES AND LIGHTS

- ❒ Use Energy Star appliances.
- ❒ Built-in and individually switched task lighting in at least 3 separate areas, such as bathroom vanity, kitchen counter, and work areas.

THE RIGHT ECONOMY

Using local businesses and products keeps the local economy healthy, while reducing the effects of transportation on air quality.

- ❒ The house is built using native and local/ regional materials such as block, brick, mesquite, and flagstone.
- ❒ The construction of the house uses local businesses, artists and artisans.

HOW TO BUY A GREEN HOME

The City of Scottsdale Green Building Program has a directory of local designers and builders who have qualified projects under Scottsdale's program.

- ❒ Request a Green Building Designer and Builder Directory.
- ❒ Look for the Green Building construction job site sign in front of homes you are considering.
- ❒ Review homes you are interested in with this guide in front of you.

A GREEN HOME IS . . .

- ✓ Healthy for your family and the environment.
- ✓ Economical because it's energy and water-efficient.
- ✓ Comfortable and durable.
- ✓ Low maintenance.

SCOTTSDALE GREEN BUILDING ADVISORY COMMITTEE

Sponsored Events

- **Lecture Series**
- **Solar Lecture Series**

  (Lectures are held Thursdays at the Community Design Studio, NE corner of 75th Street and Indian School)
- **Green Building Expo**
  October 1-2, 2004
  Phoenix City Hall, 200 W Washington

For more information on Green Building or Sponsored Events:

Call 480-312-4202
or
visit the city Green Building website at
www.scottsdaleaz.gov/greenbuilding

4/8/04

Green Home Buyer's Guide

Sustainable Building in the Sonoran Desert

SCOTTSDALE

GREEN BUILDING
PROGRAM

SEE IF THE HOUSE YOU ARE CONSIDERING HAS THESE FEATURES

THE RIGHT SITE AND LOCATION

A site with smart landscaping is important to making your home comfortable, affordable and attractive. The right location for your home improves your quality of life.

- ❒ Designed for minimal impact on site topography and natural drainage ways.
- ❒ Protected building entrance (recessed and covered to maximize summer shading).
- ❒ Designed with protected outdoor living areas (semi- or fully-covered patio, porch, trellis, shade trees, courtyard).
- ❒ Shade trees are planted on the east and west sides of house.
- ❒ Water-efficient landscaping (xeriscape).
- ❒ Plants, shrubs and trees selected for the Sonoran Desert.
- ❒ Gutters and downspouts are located to direct water away from the house.
- ❒ Irrigation system conserves water by using devices such as valves with manual flow control, a rain shut off and a timer with multiple start times.
- ❒ Neighborhood is safe for walking and biking.
- ❒ Convenient location. Consider the distance to work, school, entertainment, trails or parks, and public transportation.

THE RIGHT DESIGN

Comfort and economy are possible when a house is designed for its site and climate.

MINIMAL SOLAR HEAT GAIN

- ❒ The longest walls of the house face north and south.
- ❒ Most of the windows face north and south.
- ❒ The windows are shaded by overhangs, porches, awnings, trellises and/or trees (exterior shading devices are better than interior shading devices).
- ❒ The garage, storage, service areas, and/or infrequently used rooms are positioned on the west side as buffer spaces.

MAXIMUM NATURAL LIGHT AND VENTILATION

- ❒ All of the windows are operable and positioned for cross ventilation.
- ❒ Most rooms have windows on two walls.
- ❒ High windows are operable.

THE RIGHT EXTERIOR

A COOL SHELL

- ❒ Consider light-colored surfaces for walls and roofing.

OPTIMAL INSULATION

- ❒ The attic insulation is at least R-30, and is evenly distributed.
- ❒ Consider the use of radiant barrier to protect against heat buildup in the attic.
- ❒ The wall insulation is a type that fills every hole, crack, and void.

HIGH PERFORMANCE WINDOWS

- ❒ Windows are double-pane with low-e coating or solar screen (except on the south side, where warmth from the low winter sun is desired).
- ❒ No skylights.

MINIMUM MAINTENANCE

- ❒ The roof has a forty-year life.
- ❒ Consider high-durability roof material (concrete, clay, metal, slate, fiber-cement).
- ❒ Consider reusable/recyclable roofing material (metal, concrete).

THE RIGHT INTERIOR

HEALTHY INTERIORS

Using the right materials can improve indoor air quality and increase comfort.

- ❒ Carbon monoxide (CO) detector installed at the house/garage entry door and within each room where combustion appliances are used (sealed combustion appliances are exempt).
- ❒ The flooring is mostly a hard surface, such as concrete, tile or wood.
- ❒ Other flooring materials are natural wool, jute, seagrass, cork, or true linoleum.
- ❒ The wallpaper is not made of vinyl.
- ❒ Exhaust fans that expel moisture and odors to the outside are located in the bathrooms, kitchen and laundry areas,
- ❒ Paints, finishes, and glues contain low or zero volatile organic compounds (VOCs less than 250 grams per liter). VOC fumes can cause headaches, allergic reactions and other health problems.